July 2002

GPS/GIS combo provides picture perfect mapping

By Bob Lambert, VDEM Staff Writer

hen disaster strikes anywhere in Virginia, a new mapping tool can now expedite federal disaster declarations and approval of post-disaster mitigation grants.

Field-tested in Region III during this spring's extensive Southwest Virginia floods, this FEMA program combines geographic information system (GIS) mapping with global positioning satellite (GPS) coordinates and digital photographs.

Harry Colestock, VDEM director of recovery and administrative services, saw the program in action and touts its benefits as an analytical tool.

"Time is of the essence in helping the governor formulate a formal request for federal assistance. Now, you can actually show what's happening at that particular point on earth," says Colestock.

"You have the interaction of photographs, data and maps and can drill down to a fine scale that gives you a multi-faceted picture of the situation.

"The different layers depict not only topography, but also social, economic, cultural and historic data to provide an incredible tool for analysis."

Though preliminary damage assessment (PDA) teams have been collecting field data and photos for several years, digitized data acquisition will speed up the submission process for disaster-stricken localities and enables those unfamiliar with the territory to get a more accurate picture more quickly than ever before.

Once the data is compiled, it can be readily copied to a CD to be shared with state and local officials, helping emergency managers at numerous levels in their response, recovery and hazard mitigation efforts.

"Give me a summary sheet with the photos and we have a first brush for targeting our mitigation efforts," says Richard Dameron, VDEM hazard mitigation program manager. "It gives us a jump start on the project."

The next step will be to link laptop computers in the field directly with the computer at the disaster field office.

"In a perfect world, the preliminary damage assessment team on site will have laptop computers, GPS locators and digital cameras," Colestock says.

"As they gather data and photographs, they could then transmit the information by the most expeditious means – even satellite



Map Quest. Ginger Bumby, FEMA's GIS section chief at the disaster field office in Wise, analyzes data from a GIS-generated map of Southwestern Virginia rain gauge totals. (VDEM Photo by Suzanne Simmons.)

Connect the dots for full damage picture

FEMA's GIS disaster damage assessment maps use color-coded dots to represent specific damage structures:

- Blue minor damage
- Green major damage
- Red destroyed

These map dots can open links to pictures of specific sites. The damage map can also create a composite of several source documents (i.e. topographical, political, tax assessment and highways) and adjust graphic registration and scale. The pictures are compiled in a Microsoft Word document filed as a Web-type HTML page.

links to the disaster field office or the EOC for compilation analysis and map printouts."

With this new asset from FEMA, "picture perfect" mapping and analysis is just a mouse click away.

For more information on this mapping program, visit the FEMA Web site at www.gismaps.fema.gov/index.shtml.



River rising. Floodwaters came dangerously close to this church in the Hurley community earlier this year. (VDEM Photo by Suzanne Simmons.)

Master plan for houses of worship

By Bob Lambert, Staff Writer

hough some may think divine protection is the only safeguard needed for houses of worship, recent tornadoes and flooding in Southwest Virginia have reinforced the value of disaster planning for these facilities.

"At least one church was destroyed and several others suffered major damage. The damage these houses of worship sustained shows it's going to happen," says Dan Hall, retired Salem emergency manager and VDEM community relations reservist. "They need to have a plan before the fact."

Hall taught a workshop on this topic at this year's Virginia Emergency Management Conference, stressing that houses of worship often provide important services to the public and serve as a part of the community's infrastructure.

"Whether you call it a church, temple, synagogue, mosque or meetinghouse, these buildings house large groups of people and serve as focal points in the community," Hall says.

"Religious buildings serve as sanctuaries in every sense of the word and are as vulnerable to disasters as any other structure."

Hall says emergencies and disasters disrupt the normal use of a house of

worship, potentially affecting not only worship services, but also education programs, community meetings and activities, childcare, after-school care, social events, administrative activities and its role as an emergency shelter.

"Local emergency managers should encourage houses of worship to have disaster plans in order to have the resource available for use in a disaster," adds Hall.

A disaster plan prepares a religious body to react to a warning of impending disaster or an actual occurrence.

According to Hall, these simple questions highlight the importance of such a plan:

- Is a phone readily available for 911 calls during worship services?
- Where is the structure's main entrance?
- Who is authorized to act and speak for the house of worship?
- Where are important papers kept?
- Who is the insurance agent?
- Have arrangements been made with local contractors to repair damage?
- Where are the "as-built" blueprints?
- Are alternative methods of communication available?
- Are vital electronic records protected?
- How do you evacuate the building during a service?

Proposing a disaster plan is one thing but getting it implemented may rival the (continued on page 4)

Dixon departs for new public service position

im Dixon left VDEM this month to answer the call to ministry as development director for the Society of St. Andrew in Bedford, Va.



With regional offices in North Carolina, Florida and Texas, the society is a small Christian ministry coordinating a nationwide food salvage effort to feed the hungry.

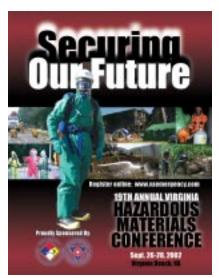
During his 13-year tenure with VDEM, Jim made an invaluable contribution to state emergency management in both the planning and operations arenas. His last position was as director of operations, Virginia Emergency Operations Center (VEOC).

He worked exceptionally well with FEMA, state agencies and local emergency managers alike through more than 15 presidentially declared disasters.

"Jim organized the VEOC into the most functional organization in the agency's existence," says Ralph Jones, assistant state coordinator for operations. "He assured clean coordination of federal and state government in initial disaster response.

"Jim has been a very active member of the VDEM leadership and consistently made excellent suggestions in setting agency priorities. He not only suggested changes but helped bring them to fruition."

VDEM applauds Jim's unwavering commitment to public safety and extends our best wishes for success in his new endeavors.



Survivor's Story: A closet saves Shenandoah couple from twister

ames and Nancy Shenk raised six children in their century-old Shenandoah County farmhouse and looked forward to retirement in the country home they'd carefully restored.

Now, they consider themselves lucky to be alive.

In early May, a tornado swept through the area, demolishing their home of 30 years along with a timber-framed barn and several vehicles.

Taking shelter in a first floor stairwell closet probably saved their lives.

Mrs. Shenk was upstairs watching television and noticed that all four television channels were reporting tornado warnings for the area.

She rushed downstairs where her husband was watching the NASCAR auto races in the living room.

Then, the back door suddenly flew open and the door in the living room slammed shut.



Worth a thousand words. The downstairs closet was the only room in the Shenk home unaffected by the tornado. (Courtesy photo.)

With moments to spare, they made it into the closet as winds ripped through the sturdy house, partially built around a log cabin. A few minutes later, it was all over.

"Out of the corner of my eye, I saw that the north wall of the house was gone," she says. "We didn't know what happened. We looked to see if we could leave.

I was in a state of shock. I just couldn't believe the devastation.'

A short time later, a neighbor checked on them and left a cell phone so they could get in touch with their children.

Mrs. Shenk went to the emergency room for treatment of cuts from flying debris.

"If we'd stayed in the bathroom, we wouldn't be here," Mrs. Shenk says. "We were lucky. We never found things we had upstairs. At our age, we're going to have to start over. I don't know how people do it."

Between 1950 and 2001, 376 documented tornadoes have struck Virginia.

The Shenks are living proof of the unpredictability of these weather phenomena and the value of quick thinking in safely weathering these storms.

VDEM's 2002 Tornado Preparedness Campaign, available online at www. vaemergency.com/02torn/, provides safety tips and statistics you can use to help ensure citizens in your community are prepared to protect themselves and their families.





Judy Cooling, our newest emergency operations supervisor, is no stranger to VDEM or

local government.

The former Russell County emergency management coordinator moved to Richmond in June to manage statewide emergency operations resource programs for the State Emergency Response Team.

Previously, she was an emergency 911 coordinator for Russell County and a community relations branch chief in the VDEM reservist program. Cooling attended Southwest Virginia Community College.

Public Affairs Coordinator **Dawn Eischen** joined the VDEM family in May.



The former public relations director for the Atlanta (Ga.) Humane Society is now responsible for the agency's disaster awareness campaigns and community outreach program.

Eischen's previous experience as a public relations specialist for the American Red Cross has helped make her an experienced "master of disaster."

The Radford (Va.) University mass communications alumni is also a certified Tellington-Touch (T-Touch) practitioner for companion animals, specializing in parrots and also works with dogs and cats.

Spring rains: Drop in drought bucket

ear normal spring rainfall amounts in many areas of the Commonwealth mask the state's true drought status. While the June Drought Monitoring Task Force report indicates improved moisture conditions over the majority of the state, it also shows new record lows at statewide stream gauging stations.

"We can expect wells to dry up this summer. It's been three years with less than average groundwater recharge," says DEQ Director of the Office of Water Resources Management Terry Wagner. "Every time it rains the rivers rise quickly, but they fall off just as quickly."

"It's not a question of if we'll have to take conservation measures, but when," says VDEM State Coordinator Michael Cline. "Local emergency managers need to look at whether or not they'll be ready to respond, if they have a plan, and if they're ready to execute that plan."

Wagner says it's important for local emergency managers to keep a close watch on water resources, coordinate with other local officials interested in the water situation and educate their community about water conservation.



Emergency Management

Community Emergency Response Team (CERT) Train-the-Trainer July 10/Alexandria; Aug. 7/Culpeper; Aug. 28/Richmond

Basic Public Information Officer July 30-Aug. 1/Portsmouth

Radiological

Virginia Operations Plan Exercise July 16/Richmond + jurisdictions

RERT: Field Team Monitoring Sep. 17/Henrico

Reservist Training

No Classes Scheduled (July, August, September)

Search and Rescue

Field Team Member (Part I) July 13-14/Tazewell

SAR Council July 27/Richmond

Field Team Member (Part II) Aug. 17-18/Tazewell

Instructor Workshop Aug. 24-25/Richmond

Technological Hazards

Operations for the EMS Provider July 8-11/Portsmouth

Public Safety Response to Terrorism (PSRT) - Awareness July 13/Roanoke; July 27/Hanover

Incident Response to Terrorist Bombings - July 14/Roanoke

PSRT - Tactical Aug. 10-11/Henrico

PSRT - Mgmt.: Sep. 10-11/ Petersburg; Sep. 14-15/Henrico

Hazmat Planning & Mgmt. Sep. 13-15/Bristol

Houses of Worship (continued from page 2)

trials of Job. Hall says he had to use all his persuasive powers to convince the governing body of his own church to move forward with its plan. Now, he is ready to share his experiences with other emergency management professionals.

"You must decide if divine intervention is the only disaster management plan that is needed for a house of worship," Hall says.

For further information on preparing a disaster plan for a house of worship, contact Dan Hall at danhall@worldnet.att.net.

Getting on track for EM degree

mergency managers who have taken courses through VDEM's emergency management training program may be eligible for credit toward an Associate of



Applied Science Degree in Emergency Management.

VDEM, in cooperation with the Oregon Office of Emergency Management, Clackamas Community College and the Oregon State Board of Education, has been certified to conduct training courses that will be granted college credit by Clackamas.

Offered through Clackamas Community College, Oregon City, Ore., the degree program incorporates most of the emergency management training courses offered through VDEM and the Emergency Management Institute (EMI) Independent Study Program.

"We are giving emergency managers and other emergency services professionals a chance to apply previous and future training toward a formal degree under this special program," says Sam Hoffman, VDEM chief of training.

The curriculum requires a total of 93 credit hours, including 18 in general education, 51 hours of core subjects, 18 hours of elective emergency management and six hours of any elective. All credits except general education may be earned through a combination of VDEM courses and EMI Independent Study. Previous college courses may apply to the general education requirement. Students pay only a nominal transcription fee per course (currently \$30) rather than full tuition because the college's program management costs are greatly reduced.

Clackamas Community College is accredited by the Northwest Association of Schools and Colleges and is recognized by FEMA as an emergency management institution of higher learning.

Registration forms and additional information are available at www.clackamas.cc.or.us or by contacting Dick Ashbaugh, Chair, Criminal Justice Department, Clackamas Community College at (503) 657-6958, ext. 2237 (e-mail: dicka@clackamas.cc.or.us).



Address Correction Requested Return Postage Guaranteed

Address Service Requested

UPDATE is a monthly publication of the Virginia Department of Emergency Management. For permission to reprint articles in your publication or on the Internet, please call (804) 897-6510.

VDEM Web site: http://www.vaemergency.com

© COMMONWEALTH OF VIRGINIA 2002

PRESRT STD U.S. Postage PAID Permit No. 436 Richmond, VA